SECONDARY SCHOOL ANNUAL EXAMINATIONS 2009
Directorate for Quality and Standards in Education
Educational Assessment Unit

FORM 1   **MATHEMATICS SCHEME C**   **TIME: 30 minutes**
Non-Calculator Paper

Name: _____   **Class:** _____

Question	1	2	3	4	5	6	7	8	Total
Mark									

Instructions to Candidates

- **Answer all questions.**

- **This paper carries 25 marks.**

- **Calculators and protractors are not allowed.**

1.   Peter has **€1**. He pays **47 cent** for a bus ticket.

      How much **change** does he get?

      _____

      ——— *(3 marks)*

2.   A dictionary costs **€29**. **Eight** students buy a dictionary each.

      (a) What is the **total cost** of the eight dictionaries?

      _____

      (b) Round your answer to the **nearest hundred** euro.

      _____

      ——— *(3 marks)*

3.   Which number divides exactly by **4**?

                   625,   426,   510,   712

      _____

      ——— *(2 marks)*

4.   There are **28 pupils** in a class.

      A quarter of them like chocolate ice-cream.

      How many pupils like chocolate ice-cream?

      _____

      ——— *(3 marks)*

5.   A model aeroplane is made to a scale of **1 : 20.**
     The model is **52 cm** long.

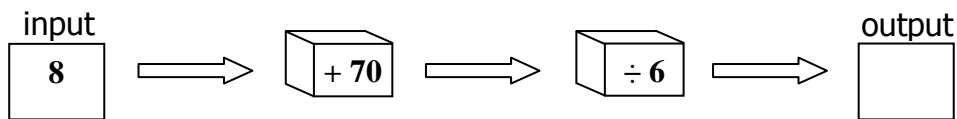   (a) How long is the real aeroplane in **centimetres**?

     _____

     (b) Give your answer in **metres**.

     _____
                                                                          (4 marks)

6.   Work out: **76 − 3 × 20**

     _____
                                                                          (3 marks)

7.   Work out the **output** of this number machine.

     input   output
     [8] ⟹ [+ 70] ⟹ [÷ 6] ⟹ [   ]

                                                                          (3 marks)

8.   Mary is planning a birthday party.
     She wants to buy some party hats and some balloons.
     (a) **Complete** the formula: | 64 c | | 8 c |

     Cost (cent) = [   ] × number of hats + [   ] × number of balloons

     (b) Work out the cost of **10 hats** and **20 balloons**.

     _____
                                                                          (4 marks)

END OF PAPER

SECONDARY SCHOOL ANNUAL EXAMINATIONS 2009
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FORM 1					MATHEMATICS SCHEME C					Main Paper					TIME: 1h 30min		

Question	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Total Main	Non Calculator	**Global Mark**
Mark																	

DO NOT WRITE ABOVE THIS LINE

Name: _____ **Class:** _____

- **Answer all questions.**
- **This paper carries 75 marks.**
- **Calculators and mathematical instruments are allowed but all necessary working must be shown.**

1. (a) John has five number cards.

   5 7 8 6 2
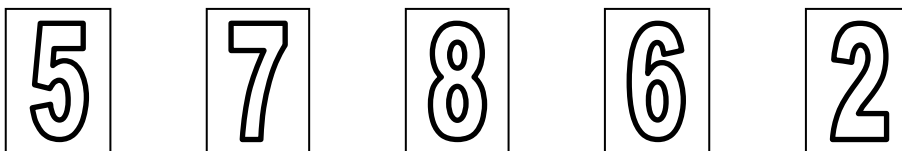
   (i) Make up the **largest** number using all the cards.

   _____

   (ii) Write this number in **words.**

   _____

   (b)   (*e*)   26 650   26 700   (*f*)   26 800
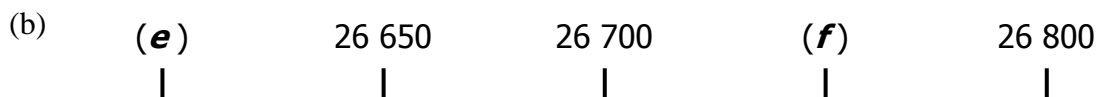
   The missing numbers on this number line are:

   (*e*) _____   (*f*) _____

   (4 marks)

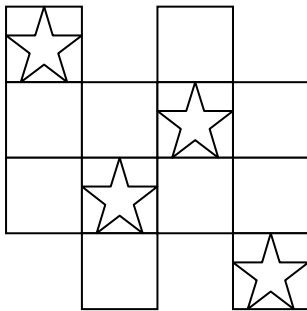2. Mary has some money in her piggy bank.

She has **nine** 20 coins, **three** 5 coins
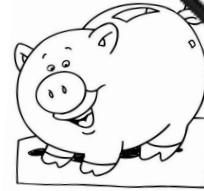
and **four** 2 coins.   How much money does she have?
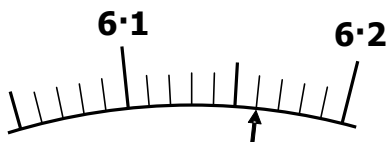
_____

_____*(5 marks)*

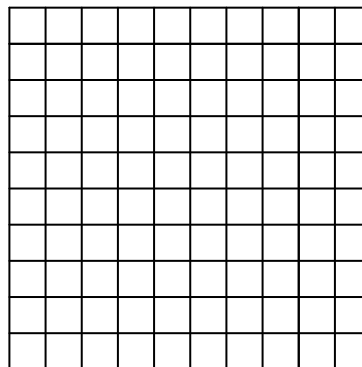3. (a) Write, as a **fraction**, the number of boxes containing a star.

Complete:

Boxes with a star $= \dfrac{\square}{12} = \dfrac{\square}{6} = \dfrac{\square}{\square}$

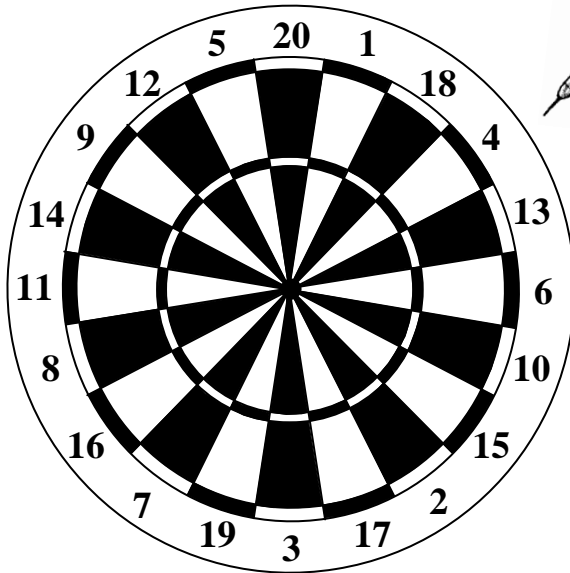(b) What decimal number does the **arrow** point to?

6·1   **6·2**

_____

(c) Shade in **15%** of the grid.

_____*(6 marks)*

Name: _____   **Class:** _____

4.   Jesmond is playing darts.
       Write down the **numbers** he should hit, if he wants
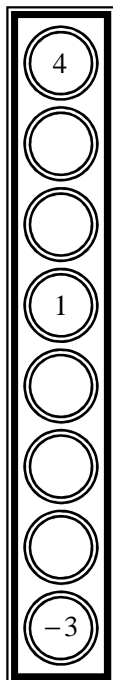

(a) **even** numbers.

_____

(b) **multiples** of **4**.

_____

(c) **square** numbers.

_____

(d) **factors** of **12**.

_____

(8 marks)

5.   The diagram shows the buttons in the lift at a supermarket.

(a)   Fill in the **missing** numbers on the buttons of
        the lift.

(b)   Jane is one floor below the ground.
        She wants to go up to the third floor.
        How many floors does she go up?

        _____

(c)   Paul is on the second floor.
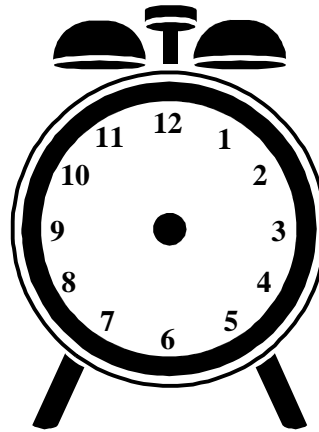   He wishes to go down five floors.
        Which button should he press?

        _____

(3 marks)

6. (a) (i)
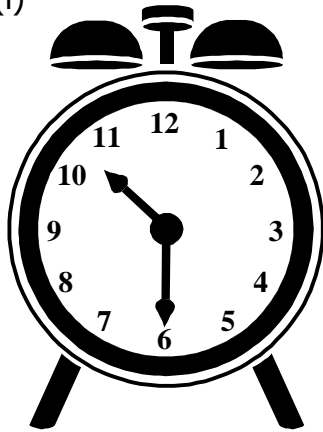
Write the time in **words**.

_____

(ii)

Draw the hands of the clock to show the time

18:40

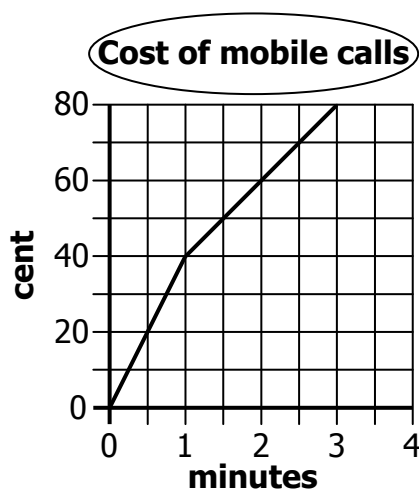(b) (i) What **day** of the week will December 7ᵗʰ be?

_____

(ii) What **date** will the first **Friday** of December be?

_____

(iii) December 25ᵗʰ is Christmas Day. What date will it be a week **after**?

_____

December 2009						
M	**T**	**W**	**T**	**F**	**S**	**S**
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

(6 marks)

7.

What is the **cost** of using a mobile for:

(a) 3 minutes?

_____

(b) 1½ minutes?

_____

(3 marks)

8. (a) Joseph buys some groceries. Work out the bill.

Item	Price	Total Cost
2 packets orange juice	77 cent per packet	€ .
$\frac{1}{2}$ kg flour	68 cent per kg	€ .
1 loaf of bread	54 cent	€ .
	Grand Total	€ .

(b) Joseph pays the bill with a **€5 note**.
What **change** does he receive?

_____

(6 marks)

9.
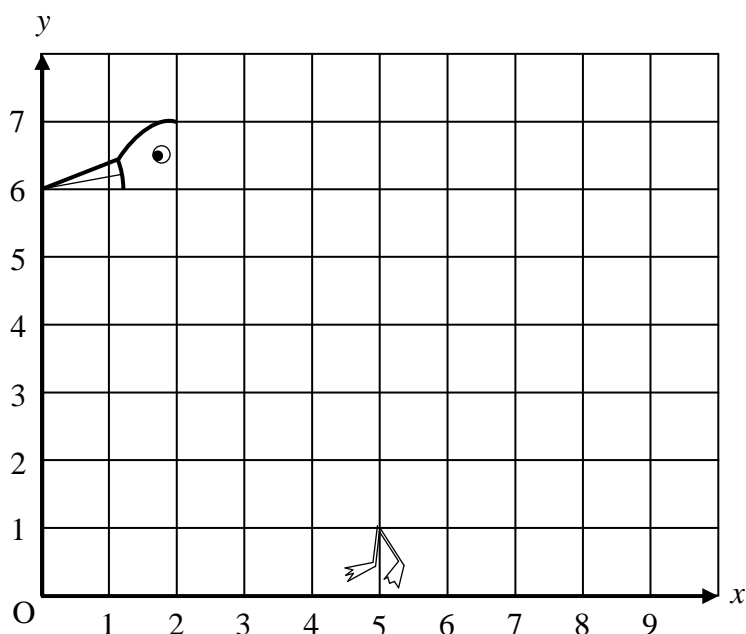
(a) **Plot** and **label** the following points:
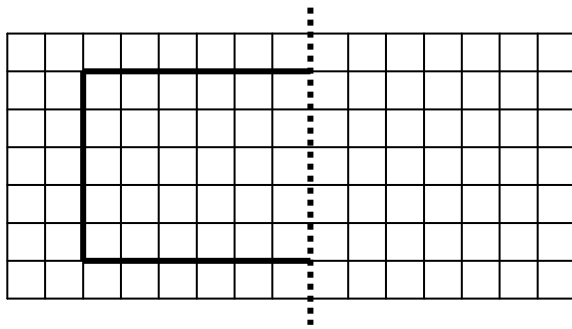
A (0, 6)   **B** (2, 6)   **C** (4, 2)   **D** (5, 1)

E (7, 3)   **F** (8, 5)   **G** (6, 4)   **H** (2, 7)

(b) Join **A** to **B**, **B** to **C**, **C** to **D**, **D** to **E**, **E** to **F**, **F** to **G** and **G** to **H**.

(4 marks)

10. (a) (i) **Complete** the symmetrical shape. (ii) How many **lines of sy...** does the shape now have...

_____

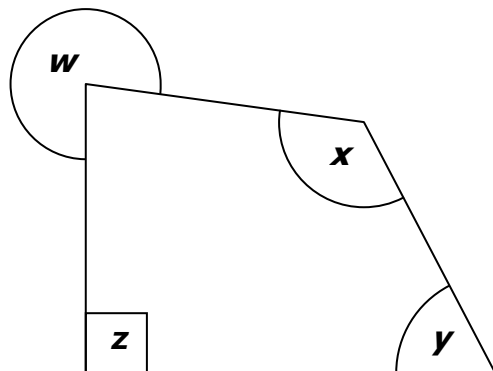(iii) Write down the order of **rotational** symmetry of the shape.

_____

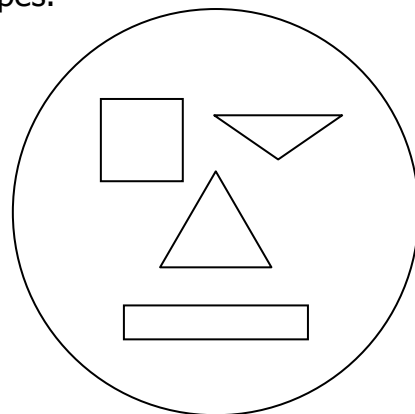(b) Write down the angle which is

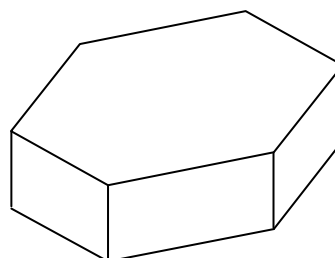**acute**: _____

obtuse: _____

right-angled:_____

reflex: _____

w

x

z

y

──────────────────────────────*(7 marks)*

11. (a) The face of this clown is made up of **five** shapes. Name each shape as **accurately** as you can.

_____

_____

_____

_____

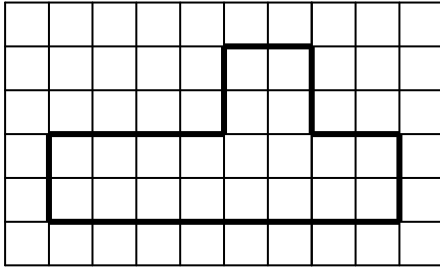_____

(b) Complete the table. This shape has:

faces	vertices	edges

──────────────────────────────*(8 marks)*

SS Form 1 Mathematics Scheme C Main 2009

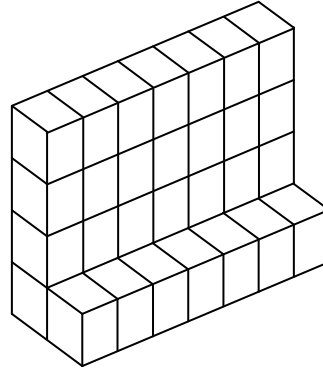12. (a) Each square is of side **1 cm**.

(i) Work out the **perimeter** of the shape.

_____

(ii) Work out the **area** of the shape.

_____

(b) Marie builds this shape using blocks.
Each block is **1 cm³**.
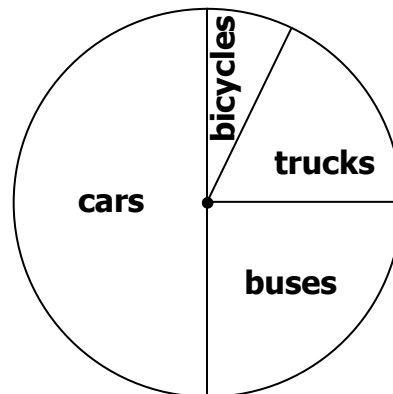
What is the **volume** of the shape?

_____**cm³**

―――――――――――――――――――――――――――*(6 marks)*

13. (a) Mandy watches the traffic driving by.
She draws a pie chart.

List the means of transport in
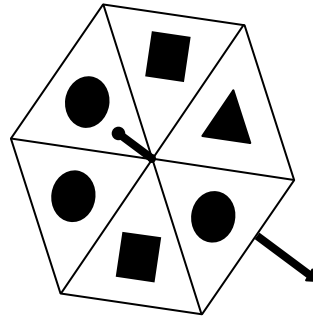the pie chart **in order**;
start with the **least** popular.

(b) The ages of five children are
3 years, 6 years, 4 years, 8 years and **4 years**.

(i) What is the **mean** of their ages?

_____

(ii) What is the **mode** of their ages?

_____

―――――――――――――――――――――――――――*(5 marks)*

14. (a) Carmen turns this spinner.
     What is the probability that this spinner
     lands on a **circle**?

     _____

     (b) Draw a sketch using these **LOGO** commands. Start from the turtle.

     PD
     FD 100
     RT 90
     FD 100
     LT 90
     FD 100

(4 marks)

END OF PAPER